INCENTIVE PLANS CURRENTLY USED IN INDUSTRY AND THEIR POSSIBLE USE IN THE U.S. NAVAL SERVICE

RICHARD EDWARD ROBB

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Richard Edward Robb
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THE PROBLEM AND ITS SCOPE

The Problem

The purpose of this study was to examine the incentive programs used in Industry, and to determine which ones could be adapted for use in the United States naval service. In the course of this pursuit, it was necessary to study the financial and non-financial incentives employed in Industry, to examine the incentives which are currently used in the Navy, and to study the proposed legislation which will affect the naval service in the immediate future.

Need for the Study

Today, the United States Navy is faced, as are the other uniformed branches of the government, with a critical manpower problem. World War II is still fresh in the memory of all of us. With the end of hostilities, millions of men left the naval service to return to civilian occupations, eager to regain their former places in the civilian economy. And many of them filled the air with their denunciations of all things military. Those who remained in the naval service were tired and exhausted after almost four years of fighting the enemy. The Navy, to get the necessary manpower

to man the post-war fleet and shore-establishment, offered many inducements to get new enlistees and extensions of enlistments. In this effort, it was less than successful. Quotas were filled, but to attain this end, it was necessary to lower the minimum requirements of enlistees.

In June 1946, the Bikini atomic bomb tests were conducted; many thousands of men who had contemplated early rejoinment with their families were forced to spend many more months in the Pacific, separated from homes and families. Thus many more men were lost to the service when their enlistments expired.

With the end of the war, the civilian demands for the necessities and luxuries of life were unbounded. Unlimited purchasing power was available, but the supply of goods was meager. As a result, civilian employment figures reached new heights, exceeding themselves in each succeeding year until the work force reached the staggering figure of sixty two million people, with a seasonal employment of seventy million people in 1947. The United States had reached the often talked of goal of full employment. With such glittering promises of good wages in private industry, with a round of increases every year, many servicemen who had planned on making the Navy a career, either resigned their commissions in the case of officers, or did not reenlist in the case of the men. The oft repeated stories of the "new pay bill," first mentioned late in 1945, did not become a reality,

and many lost faith in a Navy career, and were separated from the service.

The Navy, like Industry, is a buyer of manpower, and is in direct competition with Industry. In the industrial world, different industries are in keen competition with each other for capable, intelligent, and industrious employees. With the advent of collective bargaining as required by the National Labor Relations Act (Wagner-Connery Act) passed on July 5, 1935, the wages, hours and working conditions of the American laboring force have reached the long sought for goals of the American labor movement. Upon the passage of the Act there has been inaugurated a new era in labor-management relations. This era has ushered in a new scale of wages, improved working conditions and hours of work--the best in the history of man.

This revolution in Industry has been paralleled by equally revolutionary conditions in the Navy. With the advent of high speed aircraft, long ranging airplanes and submarines, high speed surface vessels with their complex engineering and fire-control systems, and all these branches augmented by electronic mechanisms of the most complex sort, the type of man to usefully operate these vessels and equipment has radically changed. The Navy man of today is no longer a "gob" or a "tar." He must be keenly intelligent, interested, alert, and resourceful to get the most effective

results from these complex machines of war. Utilizing man power of inferior quality would negate the advances which the scientists have made in the fields of research and development. By the same token, the present day naval officer is no longer a drill master or a watch stander. He must have vision and foresight to plan, train, and develop the men and machines under his supervision. He must also have a keen understanding of the operation, care and upkeep of the complicated equipment for which he is responsible. It is obvious, then, under these new conditions, that the officers and men of the Navy must be motivated to not only meet the minimum standards, but also a driving force must be provided to motivate them to give their best at all times, under all conditions.

Because of the competition of competent labor and the antipathy toward naval service as a result of the recent war, the changes in Industry which provide better opportunities for advancement, and the need for men of the highest caliber to man our ships today, this study was made to find incentives which will induce men into the naval service, keep them in the Service as a career, and motivate them to produce their best under all conditions.

Delimitations

This study did not include any of the wage incentive systems employed by Industry in repetitive work such as the

Gantt task and bonus system, the Halsey or Rowan premium plans, the Emerson increased efficiency plan, the Wennerlund group bonus plan, the Taylor differential piece rate plan, or the Bedaux point premium payment plan, to mention only a few. There are many wage-payment plans in Industry for use in repetitive industries, which encourage men to exert their best efforts, and to pay them increased pay for increased effort. As there are very few comparable jobs in the Navy which duplicate the repetitive conditions as found in Industry, these aspects were not investigated.

This study included only the present-day policies, that is, those which were employed just prior to the war, those during the war, and those which have crystallized since the war.

Data or surveys recently published have a time lag from one to two years. This time element is required to gather and correlate the data. Thus a survey published in 1948 would reflect conditions existing in 1946 or 1947. There has not been much data collected or published since the war, so in many cases, only trends were indicated.

Definitions

There are many definitions of incentive systems. Many are very restrictive, being limited to wage payment plans as is done by the Industrial Relations Division, U. S. Department of Labor (21:1) which defines an incentive as

"a method of payment by which earnings fluctuate more or less in accordance with actual output, thus providing an immediate financial stimulant to increase effort and output by individual workers." However, a broader definition is advocated by Scott et al (38:305), and is the accepted definition as used in this study:

> Incentives may be classified as positive and negative. Positive incentives are those agreeable factors associated with a work situation that prompt a worker to strive to achieve or excel the standards or objectives set for him. Negative incentives are those disagreeable factors in a work situation to avoid which the worker strives to meet the standards set for him. Positive incentives include the wage, expected promotion, continuity of employment, preference in case of lay-off; approval of the supervisor, fellow workmen, and the community; competition with others and the worker's own previous record; the worker's own sense of fair play and honesty in relation to rendering a just service for the total consideration given him by his employer, associates, and the community. Negative incentives include fear of layoff, discharge, reduction of wage, disapproval of employer and fellow workmen, and the sting of the worker's conscience for not having lived up to his expected possibilities.

Previous Research

As far as could be discovered, a very limited amount of research has been done in this field, although it is worthy of a great deal of study.

Becton in 1948 (5) at Northwestern made a comparative study of suggestion systems employed in Industry and the Navy, and Hobbs (18) at Stanford investigated the motivation of enlisted personnel in the Navy. However, the latest and

most exhaustive study in this area was made by the Hook Committee, (1) the Advisory Commission on Service Pay. This committee of prominent industrialists and public figures was requested by the Secretary of Defense (1:vii) "to furnish me with a comprehensive study and with recommendations concerning every significant phase of a sound system of compensation for persons at all levels, and in all branches, of the Armed Service, and also for those engaged in comparable work in the Coast Guard, the Public Health Service and the Coast and Geodetic Survey."

If the recommendations of the Hook Committee become a part of new legislation, its impact and effect on salary and wage administration in the Navy will be revolutionary. It was this consideration which necessitated its inclusion in this study.

CHAPTER II

PROFIT SHARING

Definition

Profit sharing has been defined by the Council of Profit Sharing Industries (13:xii), "as any procedure under which an employer pays to all employees, in addition to good rates of regular pay, special current or deferred sums, based not only upon individual or group performance, but on the prosperity of the business as a whole."

Philosophy

This Council, which is composed of companies utilizing profit sharing plans, has set up a declaration of principles (13:xii) which includes the following: that the essential factor of economic life is the human person; that profit sharing affords a means of granting workers freedom of opportunity to participate in the rewards of their cooperation with capital and management; that well planned profit sharing is the best means of developing group cooperation and efficiency; that widespread profit sharing should assist in stabilizing the economy; that management is responsible for a fair relationship between prices, pay, and profits; that the only solution to industrial strife is the furtherance

of the true spirit of partnership, which sound profit sharing engenders; and that the Council is dedicated to the principle of extending profit sharing, not as a panacea, but as a sincere desire of management to be fair, and the faith of management in the importance, dignity, and response of the human individual. Thus profit sharing has put into practice the philosophy which holds that labor is not a commodity, but people. This philosophy, which denies that there are classes in opposition to each other, rejects the Communistic concept of the class struggle, and believes that the worker, manager, and owner should be united for the common benefit of all. It is the belief and cornerstone of profit sharing that it creates teamwork, which raises individual productivity, which in turn naturally increases profits.

Economics of Profit Sharing

The first economic effect claimed for profit sharing by its advocates is lowered unit costs, created by full cooperation of workers, and their participation in the benefits of increased output. As a corollary, it is claimed waste, breakage and spoilage are reduced to a minimum. This increased efficiency has resulted in raising productivity as much as 40%, which has produced increased earnings of 60% above the average of the industry. This increased productivity has made possible the reduction of prices to the ultimate consumer between 30-40% (13:11).

To give an example of this claim, J. F. Lincoln, President of the Lincoln Electric Co., one of the participating companies on the Council, was quoted by the Associated Press in the Washington, D. C. SUNDAY STAR (40:A32) as follows:

> Our plan has not only increased wages, but also has reduced the selling price of products to less than half that of comparable products in the market--the average product output per worker this year was $29,748 compared with $6,895 per employee of three other large electrical manufacturers. If all industry should adopt a comparable incentive system, and it was as successful as in the case of our company, the standard of living of all people would be quadrupled. All friction between so-called labor and management would disappear. The threat of Communism would be entirely removed and the satisfaction of all workers would be greatly enhanced.

The occasion for this statement by Mr. Lincoln was the distribution of $3,821,973 in profits to 1,097 workers in December, 1948. The annual-incentive profit sharing checks averaged $3,392 per worker. It approximately doubled the employees' 1948 earnings. The plan at the Lincoln Electric Co. has been in effect since 1933. At the same time as this announcement was made, the employees received a 3% general hourly wage cut, as the basic hourly wage is geared to the Bureau of Labor Statistics Consumer Price Index, which had dropped 3.1 points for the Cleveland area between August 15 and November 15, 1948. This is a non-union company.

A second claim for profit sharing is that if it were adapted on a wide scale, it would offset the severity of the booms and recessions of the economy, as profit sharing helps in flexibility and adjustment to actual conditions.

A third claim for profit sharing lies in the field of labor-management relations. Labor unions derive their force from the sense of togetherness and belonging which is engendered in each individual worker. It gives him a feeling of importance and security. In profit-sharing companies, the indispensable place which each worker occupies is recognized. The worker understands not only his own part in the enterprise but how it fits into the whole. His work is made meaningful to him, and friction with fellow workers is minimized. Confidence and respect of management and labor for each other is maximized. The cooperation created reduces fear and insecurity, and in its place is found understanding.

Objections to Profit Sharing by Management

Many managements have objected to or have rejected the profit-sharing principle for many reasons. The chief objections heard most frequently are these: that eventually, only a minimum amount of profits will be left to management; that all company books will eventually be open to labor unions; that eventually, organized labor will take over control of management; and the reduction of worker morale in non-profit years. The experience of profit-sharing companies has refuted all these arguments (13:14-18). The labor strife since the war has been caused chiefly by organized labor demanding a larger share of the profits. This is one of the avowed goals of labor. Polls of 90,000 workers by Vandenberg-Herring (13:16)

showed that 48% of the workers wanted an equitable distribution without definite commitments, and 42% of them desired sharing of profits less than 50%. A realistic approach to this nation-wide problem is a stable, well organized, thoroughly understood profit-sharing plan. This would and has reduced labor strife firmly and equitably.

The companies with profit sharing plans keep their employees well informed of industry-wide conditions, and company status. This does not require opening the books as intimated by opponents. A well informed labor force, with open lines of communication operating up and down, is a productive, cooperative and contented work force. It has not been the experience of profit sharing companies that they must open their books to the laboring force.

Organized labor believes that certain, presently claimed prerogatives of management should be shared. The leaders of organized labor have stated repeatedly that they do not desire to assume or take over managerial duties or functions. However, certain functions which some managements presently guard so zealously should, and rightly so, be shared with the laboring force. Where management has shared many of these former prerogatives of management, a better educated, responsible and productive work force has resulted.

Companies, like Eastman Kodak Co., who in 1937 experienced a "no profit" year and had no profits to share with the work

force, discovered that this resulted in a better understanding of the operation of the plan by the work force (13:19).

Objections to Profit Sharing by Labor

Organized labor's stand against profit sharing has been based on the fear of unreasonable speed-up, that it would weaken collective bargaining, and that although labor would share in risk bearing, it would not share in the management. In no successful profit-sharing company have these objections been realized (13:19). Rather, the base of collective bargaining has been broadened, no unreasonable speed-up has occurred, and the workers are paid in proportion to the extent of their increased productivity. Actually no risk sharing has been involved by labor, and labor has gained by an increased share of management functions. The survey conducted by Senators Herring and Vandenberg in 1939 (13:20) indicated that of 90,000 workers in 104 industries polled, 87% were in favor of profit-sharing.

Profit Sharing and Related Plans

It cannot be over emphasized that there is no one plan which is tailored to fit all companies or industries. Each plan must be geared and designed to the objectives, needs, and conditions under which the company operates. Nor should a profit sharing plan be installed as a panacea for labor-management troubles and ills. To be successful, a profit sharing plan must be superimposed on company policies,

procedures and relations which are sound, humanistic, fair and impartial. Profit sharing plans can be used to augment and improve labor-management relations, never to create good industrial relations.

The type of plan to be installed depends on many related factors which should be considered before any of these plans are adopted. A new company will find profit sharing unwise, if profits are to be plowed back for expansion and growth of the company. An industry which has large cycle fluctuations would be unable to build up necessary reserves to diminish the intensity of the cycle fluctuations if direct profit sharing plans were adopted. The type of program to be initiated would depend on whether or not it is a high or a low cost industry, whether or not the company is in a highly competitive market or its products are protected by patents. The size of the business is also a controlling factor.

A brief description of the basic, different types of profit sharing plans follows:

I. Direct Profit Sharing Plans

A. Cash Plans--a predetermined percentage of the company's income is distributed periodically; these payments are exclusive of the wages previously paid.

B. Wage Dividends--percentage of profits paid to workers determined by dividends paid the stockholders.

C. Stock Ownership--the workers receive shares of stock in the enterprise.

D. Trust Plans--a percentage of company income accrues to a trust fund, with or without employee contributions.

II. Indirect Profit Sharing Plans

A. Pension Plans--retirement annuities are furnished by company, with or without employee contributions.

B. Guaranteed Annual Wage--employees paid a salary.

C. Production Sharing Plans--employees are guaranteed a share of the sales dollar.

D. Cost Savings Sharing Plans--extra earnings proportional to lowered production costs.

E. Associative Plans--profit sharing and management sharing are transferred to an independent association.

F. Cooperative Plans--employees are made co-managers and co-owners.

III. Related Programs

A. Multiple Management Plans--the development and participation of employees is gained by education received as members of plant, executive and various other boards, reporting to the Board of Directors.

B. Employee Benefits--includes group life insurance, sick benefits, disability benefits, accident benefits, retirement annuities, educational programs, paid holidays and vacations, and credit unions.

Advantages of Cash Plans

The advantages claimed for cash profit sharing plans are as follows:

1. Cash receipts of profit shares are more tangible and are concrete evidence of increased effort; thus greater incentives for future increased efforts are provided.

2. Interest in increased production is maintained at a higher level.

3. Cash distribution provides for an immediate improvement of standards of living for the employees.

4. Freedom of action in the use of increased earnings is given to the worker.

<u>Advantages of Profit-Sharing Trusts</u>

Profit-sharing trust, where the profit share is turned over to a trustee for future distribution to the employee, claims these advantages:

1. Profit sharing trusts provide severance benefits, pension, death and disability benefits and thus avoid duplicate expenditures. This is a great advantage in periods of reduced production and profit.

2. Trusts act as a brake on inflationary and deflationary cycles of the economy. The draining off of surplus money in periods of inflation tend to minimize the effects of the spiral, and in periods of deflation, the existence of cash reserves, which provide severance and retirement pay, provide increased purchasing power.

3. The psychological effect of continued benefits in periods of depression, when cash-payment plans are not feasible and must be cut off.

4. The tax advantage gained by these plans under section 165(a) of the Internal Revenue Code. Profit shares turned

over to trustees are not taxable until distributed. Thus the entire funds continue to gain interest, which is also tax exempt. When the tax is applied finally to the trusteed shares, the tax rates are the much lower long-term capital gains rate.

5. Profit sharing trusts engender loyalty to the company, and reduce labor turnover, which in turn reduces training costs, a sizeable item in itself.

Installation Procedure of a Profit Sharing Plan

The Council of Profit Sharing Industries, having polled its members, has declared that the following conditions (13:50) must obtain, and action taken in the order indicated, before any plan is adopted and installed:

1. The management of the business must have a sincere desire to further the team-spirit of the organization.

2. All plans must be carefully studied and evaluated, and the success of similiar plans investigated in comparable companies.

3. The plan selected must be the one best suited for that company.

4. The plan and its philosophy must be presented to (a) the Board of Directors, (b) the Stockholders and (c) the employees, in that order.

5. Revision and modification of the plan as determined by suggestions and recommendations received from these three groups.

6. Draw up the formal agreements of the plan in writing.

7. Formally announce the final plan to the employees.

8. Administer the plan by continuously selling the plan through education of the employees.

The Council feels that as a result of the experiences of its participating members, this procedure is essential and sound, and must be followed if any profit-sharing plan is to be successful.

Extent and Growth of Profit Sharing Plans

The Council's survey shows that in the United States, only one half of 1% or approximately 15,000 out of 3½ million business firms, or 5% of corporations utilize profit sharing plans. Although many companies have tried profit sharing, the growth of profit sharing has remained static because the companies adopting profit sharing just about equal those who drop the plan.

The National Industrial Conference Board, which hereafter will be referred to as the NICB, reports that 60% of the plans investigated were terminated. However, the Industrial Relations Counselors report only 33% of the plans terminated. A comparison of these two surveys would indicate, however, that only 13.2% of the plans fail due to the plan itself. The biggest causes of failure are the termination of the business itself, 21.4%; and the substitution of a different plan, 12.4% of the failures. The surveys indicate

that over 53% of the plans succeed.

The Council concludes that in view of the fact that 90% of all business ventures fail, and that the average life of a business enterprise in the United States is only five years, the survival rate of profit sharing plans is better than the survival rate of business itself (13:44). If business is risk taking in the economic field, then profit sharing is a challenge to risk taking in the social realm.

The 1937 survey by the NICB concludes that the success of profit sharing is not only a function of the plan itself, but is dependent on the philosophy of the management administering and interpreting the plan. This was the same conclusion reached by a survey made in 1920 by the same organization (28:44).

A survey by the NICB in 1939 showed that 158 out of the 2700 companies studied, or 5.9% of the total, had installed profit sharing plans. A survey conducted of 3498 businesses in 1946 by NICB found 401 companies utilizing profit-sharing, or 11.5% of the total. The Bureau of Labor Statistics has conducted a survey and up to August 31, 1946 found only 300 companies out of 15,636 studied employing profit sharing plans. This figure is 2% of the total. This survey found that profit sharing is found most frequently in chemical, metal working, and department store fields.

The greatest growth of profit sharing plans occurred during the past decade. The restrictions and wage freezes

by the Federal Government during the war stimulated the growth of employee profit sharing. Also the high tax rates were added incentives for the installation of profit sharing plans because the tax structure permitted tax advantages to both employers and employees under profit-sharing plans approved by the government.

A further impetus to the increased adoption of profit-sharing plans has been the changing concept of the purpose of profit sharing. During the war, many companies installed pension payment plans. The advantage of financing pension plans out of the company's profits is considered better than financing them by contributing fixed amounts under an actuarially determined pension plan. This concept is encouraged by government regulations.

The 1948 survey by the National Industrial Conference Board reports these following conclusions of profit sharing plans studied in 202 companies (28:3): profit sharing is more common in small and medium sized establishments; the most significant development is the trend toward deferred-distribution plans, as 60% of the plans studied were of this type; the events of the past decade have stimulated the growth of profit sharing; whereas unions have been opposed to profit sharing in the past, several plans were instituted at the request of the union; that under current-distribution plans, in 1946, companies paid about 8% of the employees

compensation, while under deferred-distribution, they paid an average of 10% of wages or more; that the largest single cause for dissatisfaction of profit sharing plans is caused by unsatisfactory employee attitudes.

CHAPTER III

SUGGESTION SYSTEMS

Definition

A suggestion system may be defined as a definite, formal procedure for soliciting, receiving, evaluating and rewarding employees' ideas which may benefit the company in its operations and procedures, or in company and public relations.

Advantages Claimed for Suggestion Plans

A perusal of the literature on suggestion programs includes these advantages claimed for the installation of a formal suggestion system:

1. Provides a formal assured avenue of employee expression.

2. Employees become participants in the improvement of the enterprise.

3. Provides a means for rewarding employees, and to obtain recognition for constructive thought and ability.

4. Provides an incentive to the group to produce better products at lower costs.

5. Encourages and stimulates employees to make suggestions that are of benefit to all concerned, for a better understanding of the mutual problems and interests of both management and labor, and to develop more cordial relationships.

6. Improvement of operating methods and procedures.

7. Provides a basis for promotion, by enabling the company to recognize the more interested and constructive thinkers in the labor force.

8. Employees gain satisfaction in seeing their own ideas in practical use.

9. Employees gain by having their work made easier or safer by their own ideas.

10. Gives each employee an opportunity to express himself individually to management.

11. Engenders a feeling of belonging in each employee, and increases company loyalty.

12. Provides an incentive to show greater interest in his working environment.

13. Training and supervision are simplified, as employees think constructively about their work.

14. Helps satisfy the individual's desire for recognition and status gained by the publicity given the acceptance of his suggestion.

15. Facilitates communications between employers and employees.

Guiding Principles

One of the basic principles for developing a good suggestion system is that it be a written management policy which definitely describes the procedures for the submission

of employees' ideas. As a corallary to this concept, the basis of awards must be fair and equitable.

Another principle with which many managements do not agree is that foreman and other supervisors be permitted to participate in the program. Permitting the supervisory force to participate tends to prevent their hostility and antipathy from weakening or destroying the good effect of the program.

One of the most frequent causes for failure of suggestion systems is the slowness in handling and processing suggestions. If suggestions are not processed quickly, interest in the program is soon lost. Some companies report that it requires sixty to seventy days to pass on suggestions, while other companies take final action within ten days on 95% of their suggestions (24:5).

The operation of a suggestion system should not overload the supervisors with additional work. Although this group generally acts as investigators of suggestions in many manufacturing plants, it has been found expedient to assign men as investigators as their sole duties. It is this group then which works with the foreman and supervisors, and does the major part of the work, referring to the foreman for help in evaluation.

The rules should clearly indicate those who are eligible to participate and those who are disqualified by the very nature of their duties. Personnel specializing in time and

motion studies, and personnel assigned to work standards and methods departments are among those groups generally disqualified from participation.

Assistance to suggesters should generally be given, recognizing the educational limitations of the average employee. Many companies incorporate in their suggestion forms a space where assistance may be requested. Generally, assistance is given by the suggestion system manager; however, if after analysis it is beyond his scope, other technical assistance is obtained by the manager.

Maintenance of the anonymity of the suggester is considered imperative by most companies. This will prevent complaints of favoritism. A survey by the NICB in 1942 (26:8) revealed that of the 130 companies participating in the survey, 37% reported complete secrecy until after the adoption of the suggestion, while the remainder reported varying degrees of anonymity.

One of the quickest ways to weaken and stifle employee participation is to handle rejections abruptly or carelessly. It has been estimated that over two-thirds of all suggestions submitted will be rejected (24:9). Some companies having committees handling suggestions require that a member of the committee meet personally with the suggester to explain fully and clearly why the suggestion is unacceptable. Some companies require the suggestion program manager to perform this function. Other companies use form letters, assigning reasons

why the suggestion was not received. Regardless of the method used, it is imperative the suggester be notified promptly and courteously why his idea was rejected.

Most companies report that awards must be generous and commensurate with the value to the company of the suggestion. If any errors are made in rewarding, it should be on the generous side. Some companies provide for both monetary and non-monetary recognition. However, most personnel executives feel that money provides the biggest incentive to employees for submitting suggestions. One suggestion manager is quoted as saying (24:10) "we try to be liberal and adopt as many suggestions as possible, as we believe this encourages the suggester to think harder and submit more and better ideas."

One source of pitfalls in a suggestion program is duplication of ideas. This is handled differently by many companies but evidently a good method is to establish priorities on suggestions by stamping each with the date and hour of receipt. This requires that suggestions be collected from the suggestion boxes daily. In this regard, companies that collect suggestions from the boxes at infrequent intervals soon find a slackening of interest in the program.

It is essential that the employees know the kinds of suggestions which may be rewarded. This should be laid down in the basic policy of the program and be well publicized

and thoroughly understood. However, when particular problems present themselves to management, they should publicize these difficulties and invite suggestions on these problems.

Many companies have adopted formal policies regarding patentable suggestions, which include technical and legal assistance given free to the suggester by the company. Although policies varied, the 1942 survey by the NICB discloses (26:11) that 26.4% of the ninety-one companies reporting have written patent agreements covering suggestions which have patentable features.

Some companies have developed formulas by which suggesters receive awards based on the continuation of benefits to the company beyond one year. Thus in these companies with more generous award policies, suggesters can receive awards amounting to thousands of dollars. This provides an additional incentive to produce constructive thinking.

Before the suggestion program is installed, a great deal of thought and effort must be spent in propagandizing the new system. Employee interest must be created and maintained. This can be done through the house organ, letters sent to the homes of the workers and by special posters. A hand book or manual should be compiled and given wide distribution. The manual should include the following information: objectives of the plan, scope, eligibility rules, how to enter a suggestion, the suggestion committee, awards, handling of rejections, handling of patentable suggestions,

and explanation of printed forms (26:4). After the system is installed, interest must be maintained by publicity calculated to keep the plan constantly in the minds of the employees.

However, the keystone of success of the entire program is the sincerity and backing of the entire management and supervisory group. If this is lacking, the plan is doomed to failure.

<u>One Company's Success With a Suggestion Program</u>

The Metropolitan Life Insurance Company (24) reports an eleven-year survey of the success of one company's suggestion program between the years 1931-1941. A total of 12,223 suggestions were received. There were 1,643 suggestions which received $8,945 in cash awards; 1,249 merit awards totaling $3,281.50 were granted, and supplementary awards of $3,300 were made; 9,238 letter awards were given. An audit of only 56 of the 1,643 suggestions given cash awards revealed that the company effected savings of $39,830.79 in the first year of their application. The monetary return to the company from its suggestion program was of a very high order. The company explains that the letter awards were educational for the employees, raised the morale, and augmented communications between the employees and the employer.

Innovations of Awards

The suggestion manager of the Standard Register Company, Dayton, Ohio, reporting in the April 1949 issue of *Factory* (2:61) described the new awards system his company has instituted.

Practically all cash awards have been discontinued. In lieu of cash prizes, each suggestion accepted is awarded $2.00 as a token reward. Monthly, the best seven awards are ranked in order of merit, and the winners choose from the varied and attractive merchandise prizes which have been displayed permanently in the plant.

Twice a year, the awards committee reviews all suggestions adopted during the previous six months and selects the three best suggestions for additional awards of $150, $100, and $75.

The result of this innovation has increased the number of suggestions received 400 per cent in its first six months of operations.

Growth of Suggestion Systems

Suggestion programs are not new in Industry. The Eastman Kodak Company was the pioneer in devising a plan by which employees were paid for their ideas and suggestions. Its original plan was placed into effect in 1898 (25:10). Its plan has been copied by many companies in the United States.

An analysis by the NICB (26:4) showed that of over half the plans of 132 companies studied in 1942, nearly one half the plans had been in operation over ten years. A tabulation by age groups follows:

In effect 40 years or more:	2 plans
In effect 30 years or more:	4 plans
In effect 25 years or more:	12 plans
In effect 20 years or more:	23 plans
In effect 15 years or more:	38 plans
In effect 10 years or more:	62 plans
In effect 5 years or more:	86 plans

This same reference includes the complete formal suggestion systems of 23 companies. The 23 plans presented include companies with as few as 270 employees to the largest company which employed 57,000 people.

The American Iron and Steel Institute made a comparable survey of suggestion programs in the Iron and Steel Industry in 1948 (3). The members of the Institute include thirty-five different iron and steel corporations having a combined payroll equivalent to more than 80% of the total employment in the entire Industry. This survey disclosed that of the thirty-three companies replying to the questionnaire, thirteen companies had a formal system; fifteen did not presently have any plans in effect; two did not have formal plans, but accepted suggestions as presented; one company was revising its plan; one company had recently discontinued its plan; and one company had an Employees Patent Policy (3:1). Unfortunately, this survey does not

show what percentage of the industry is covered by the companies having formal plans.

An organization, formed to foster the development of employee suggestion programs generally, is the National Association of Suggestion Systems. This is a non-profit organization, founded in 1942, to improve the operating techniques of suggestion systems, to encourage their adoption in industry, and to act as a medium for the exchange of ideas of cooperating companies. Its services include a monthly magazine and bi-monthly news letter, provides statistical information and research studies, library exchange and consulting service for participating members of the Association.

During the late war, the War Production Board encouraged suggestion systems very strongly. It published technical bulletins which were compilations of war winning suggestions, and made available to any company who desired them, blueprint, specifications and descriptions of all worthwhile suggestions received. It set up an Exchange Section at its headquarters in Washington, D. C. to provide this service. The Board stated in 1943 (42:61) that 93% of all the Labor-Management Committees reporting to the War Production Drive Headquarters had suggestion systems in operation.

No post war surveys of the extent of suggestion systems in Industry could be located. However, from the phenomenal success these systems enjoyed during World War II, it can reasonably be expected that most of them are still in operation.

CHAPTER IV

OTHER INCENTIVES IN INDUSTRY

It has been shown previously that profit-sharing companies have established deferred systems of payment. These deferred payments have been to provide pensions for their retired and superannuated employees. Thus, the cost of the pension plan administration has been paid in whole by profit sharing. Used as an incentive technique, it has solved a problem which is just now beginning to plague Industry.

The labor movement first achieved union security with the passage of the Wagner Act in 1933. Their aim since then has been to strengthen union security and increase labors' share of the profits. During the post-war period, three rounds of wage increases were gained for the laboring force. With the law of supply and demand now in a more balanced state and faced with a small rise in unemployment, the labor unions have turned to welfare demands. The union demands in 1949 have turned to pension plans, illness and disability pay, life insurance, hospitalization insurance, and medical and surgical insurance. This program has been termed by some executives as the "womb to tomb security." To further strengthen the demands of labor, the Supreme Court on April 25, 1949, by refusing to review the Inland Steel case, held in

effect that employers must bargain with unions on worker pension plans. The Inland Steel Company had appealed the decision of a United States Circuit Court decision to the Supreme Court. However, only companies engaged in interstate commerce are affected, and the unions must be eligible to use National Labor Relations Board machinery. Thus those union leaders who have failed to sign non-communist affidavits cannot force managements to bargain on these issues.

In the March 1949 issue of Factory (15:68-71) the editors attempt to show if the present demands of unions had been operative since 1929, only during just five years of that twenty year period would corporate profits of all manufacturing companies been larger than the cost of the welfare plans as now proposed.

Thus it is seen the policies which have been developed as incentives and were planks in the personnel administration plans of well managed companies, are now the demands of labor.

Pension Plans

It is anticipated that pension plans of $100 per month as have been won for the mine workers will be the goal of union demands in 1949. These demands will tend to climax the phenomenal growth of pension plans in the past decade (31:27). The history of pension plans in the United States can be divided into three phases: 1900-1925, company-administered plans; 1925-1942, insured plans; and from 1942 onward, insured and self administered plans (31:31). Company

administered plans were those in which both administration and control were in the hands of management. These plans were vague, poorly defined, and unreliable as regards payment. Reserves were not generally set up, as the plans were not definite commitments of the companies.

Insured plans required the setting aside of funds and the payments yearly to an insurance company. The payments were in calculated amounts which would be adequate to pay the pension benefits as provided under the plan. It was an actuarially sound system of accumulating pension reserves. In addition, a highly trained investment management for the pension funds was provided.

In 1942, there was introduced a new type of insured pension plan called the Individual Annuity policy plan. Also banks began to act as managers of pension funds under self-administered plans. Some companies began to employ an insured plan for one group of employees, and a self-administered plan for another group. This change in pension plans was caused by the increase in personal and corporate taxes which was enacted in 1940, and the amendment in 1942 to sections of the Internal Revenue Act affecting employee pension and profit sharing plans.

O'Neill states (31:74):

> The true costs of a pension plan to an employer are represented by the difference between his financial outlays to maintain the plan and the savings which resulted from reduced labor turnover, the retirement of super annuated employees, and

> the increased efficiency of personnel, all brought about through the operation of the plan.

He lists ten different factors which affect the actual costs of a pension plan. It can be readily understood that this is a complex problem. A poorly planned pension program could easily spell financial doom for a company. O'Neill's book gives an excellent treatment of this complex subject. In actual use, will be found many varied plans, dependent on the needs and financial condition of the companies instituting the plans.

In 1945, O'Neill made a comprehensive survey of 612 different pension plans covering twenty seven different industries (31:252-329). The 612 plans include 313 group annuity, 152 individual annuity, 121 self-administered, and twenty five combination and other plans. Approximately 60% of the plans studied were in manufacturing industries. Approximately 81% were established during the years 1940-45. During this period, 94.1% of the individual annuity plans were established, as compared with 83.5% and 72.5% for self-administered and group-annuity plans.

Of the plans surveyed, 43% were established by corporations of either 1,000 to 4,999 employees (191 plans) or with 5,000 to 9,999 employees (71 plans). O'Neill states that this distribution is skewed by the selection of the companies under study and does not reflect the true distribution of pension plans in Industry. However, for companies employing

less than one hundred people, 82% of them utilized individual annuity plans. Also, it was found that 21% of all individual annuity plans are found among employers of one hundred persons or less. Combination plans are in use most often by employers of one thousand or more. For very large employers, with fifty thousand employees and over, self-administered plans outnumber either type of insured plan.

The percentage of plans providing for deferred vesting was 67.5%. Vesting refers to the interest in the employers contributions by the employee when he withdraws from the company. These withdrawal or severance benefits depend on service, amount, and the form of the vesting. Service was generally based on five, ten, or fifteen years service.

When analyzed regarding death benefits, 75% of the group annuity plans provided group life insurance to provide death benefits. This same percentage was found for self administered plans. All individual annuity plans automatically provide for a death benefit.

An analysis of the plans regarding disability benefits found no uniformity of policy, but most plans had indirect provisions attached. The individual annuity plans seem to cover this phase more clearly than the other types. One company in the group annuity plan pays 96% of the company's contributions, immediately upon disability, in cash. Other companies have set-up separate funds which in effect constitute self-administered disability funds.

A new interpretation of disability was instituted by a large utility company in 1947. On January 1, 1947, the Consolidated Edison Company recognized alcoholism as a basis for retirement of some long-time employees on disability pensions.

Dr. John J. Wittmer, the Director of Industrial Relations, was quoted as follows (39:4): "We consider that chronic, irretrievable alcoholism is a disabling condition because we feel that the basis for alcoholism is due to a definite pathological condition."

The company reports that 10 to 15 employees have been given disability retirements each year since the policy was instituted.

Extent of Pension Plans

As in many other surveys, there does not seem too close agreement in findings. However, the Bureau of National Affairs, after an analysis of 1300 contracts, found that only 5% provide for pensions (22:283).

Holiday Observance Practice

This policy in Industry is one which has been expanded multi-fold in the past ten years. The National Industrial Conference Board (27:9) has traced this growth of paid holidays for non salaried workers:

TABLE I

TRENDS IN HOLIDAY PAY TO HOURLY WORKERS

Year	Per Cent Companies Paying One Day or More
1936	9.0
1940	9.6
1946	41.7
1947	51.6
1948	76.6

It is seen that since 1936 when only 9% of the companies paid for one or more unworked holidays a year to its hourly workers, the practice has spread until in 1948, 76.6% of the companies had accepted this practice.

The Conference Board found also that now 75% of the companies have the same paid holiday practices for both salaried and non salaried workers. In the remaining 25% of the companies, salaried workers are granted more paid holidays than hourly workers, generally never more than three paid holidays.

The number of paid holidays varies from one day which represents 0.5% of the companies, to eleven days, which are paid holidays for only 1.1% of the companies studied. However, six days is the majority practice for both salaried and non-salaried workers. This number is specified by 64.7% of the 190 company plans studied for hourly workers, and by 57.2% of the 264 companies studied for salaried employees. The paid holidays granted are generally New Year's Day,

Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas Day.

Premium rates of pay are generally paid for work performed on holidays. The National Industrial Conference Board survey (27:7) found that hourly workers were paid double time for such work by 66.8% of the companies, double time and one-half by 20% and triple time by 7.4% of the companies. Salaried workers are generally paid the regular salary plus straight time for the holiday bonus actually worked.

Eligibility requirements generally require a minimum of service of from one to three months, but this practice varies widely. Attendance requirements in 94.6% of the companies studied state that to be paid, the hourly worker must work the day before and the day after the holiday. This same requirement was found for 83.7% for the salaried workers. The attendance rules are generally imposed as a technique to reduce absenteeism, and to withhold holiday pay from employees who are sick, disabled or on leave who would not have worked on the day the holiday occurred.

The Board found that there existed no significant differences between unionized and non-unionized companies regarding paid holiday practices. Both large and small companies seem to be following similiar paid holiday policies. The observance of six holidays with pay for hourly workers appears to be common for all industries. The public utilities industry was found to be the most generous in granting paid holidays, with most companies granting seven or more annually.

The shipbuilding, and iron and steel industries were granting no paid holidays.

The survey made by the Board covered the holiday wage practices of 265 companies covering 1,750,000 workers. The Board concluded that the marked increase of holiday pay for hourly workers in the past eight years can be attributed to two causes (27:8): to wartime wage stabilization orders, and to "holiday package" wage agreement negotiated since the war. The trend indicated by the survey seems to show that six days of holiday pay is the optimum for the majority of industries and that no general increase is indicated in the immediate future.

Paid Vacations in Industry

The Bureau of Labor Statistics, Department of Labor, report that a survey in 1945-1946 showed that three out of four manufacturing establishments had a formal paid vacation plan for hourly workers after one year's service. For office workers, nine out of ten plants provided for a formal plan. Hourly workers were generally granted one week's paid vacation, while two weeks were allowed office workers in 40% of the companies (20:14).

A similiar survey in 1937 disclosed that only 25% of the plants gave paid vacations to hourly workers, while 80% of the companies gave paid vacations to office workers and other executives.

The survey covered fifty-six manufacturing and seven non-manufacturing industries. The number of company plans studied numbered 53,000, covering seven million workers. The survey concluded (20:15) that formal vacation plans are common to industries having large units and high wage rates, and were generally found in unionized companies. The chemical industries provided vacations most commonly after one year's service and also tended to furnish the longest vacations. In non-manufacturing industries, electric light and power generally granted two weeks' vacation after one year's service. Viewed sectionally, the New England and Pacific Coast areas ranked highest in the proportion of formal paid vacation plans.

Sick Leave in Industry

Formal plans for paid sick leave for plant workers were found in less than 3% of the manufacturing companies, and only 8% granted sick leave to office workers. Chemical companies were found to have formal sick leave plans more frequently than any other manufacturing industry. By comparison, formal plans were found more frequently in non-manufacturing industries. The study showed that over 50% of the electric power companies provided for sick leave, while a third of all retail stores had formal plans for paid sick leave.

In 1948, the Research Council for Economic Security conducted a survey on this subject in the State of Illinois. The findings of this survey agree quite well with the Bureau

of Labor Statistics study. From its study of Illinois, the Research Council attempted to estimate the number of firms having formal sick-leave plans in the entire United States (33:9). Its estimate did not agree with the Bureau's survey, and the Council concludes that a real need exists for a more accurate and detailed study on the development and extent of formal sick-leave plans.

Office Worker Incentives

The National Office Management Association conducted a survey of 1507 companies in the United States and Canada regarding their practices and policies. It is an inclusive survey and covered three distinct types of benefits: leave, insurance and monetary types. The data are broken down by size and type of company and by geographical area, and provides a complete picture of company practices regarding office workers. Table II shows the extent of the most prevalent practices in rank order (30:5).

One factor which distorts this picture is the inclusion in the survey of Canadian companies. As seven of every ten Canadian companies reported concern for welfare of their employees, the high percentage of companies reported having these plans in the United States alone is doubtful.

TABLE II

PER CENT RANKING OF MOST PREVALENT PRACTICES

Rank	Practice	% Companies Have Plans
1	Vacation	98
2	Sick Leave	88
3	Hospitalization	85
4	Life Insurance	83
5	Jury Duty	81
6	Sickness Insurance	71
7	Pension	68
8	Surgical Insurance	62
9	Military Leave	59
10	Accident Insurance	56
11	Dismissal Leave	54

Table III shows the least prevalent practices for office workers (30:5):

TABLE III

PER CENT RANKING OF LEAST POPULAR PRACTICES

Rank	Practice	% Companies Do Not Have Plans
1	Guaranteed Annual Wage	93
2	Stock Purchase Plans	92
3	Maternity Leave	91
4	Terminal Leave	91
5	Credit Unions	88
6	Profit-Sharing	85
7	Suggestion Plan Payment	84
8	Seniority Wage Increase	82
9	Merit Rating	82
10	Pay Advances	81

The practice of the guaranteed annual wage was not surprising; the survey showed only 7% having plans of this nature.

Since the war, inclusion of maternity leave plans has dropped to a low level, as very few companies support this practice. The fact that only 16% of the companies studied have suggestion plans for office workers is not surprising, due to the routine nature of the work.

Guaranteed Wage Plans

The Bureau of Labor Statistics has defined a guaranteed wage plan in these terms (19:1): "A written or unwritten arrangement by which an employer guaranteed or assured to some or all of his employees, in advance, a definite period of employment equal to at least three months a year, or an equivalent amount of wages." The Bureau admits that the definition is very broad, but by this definition, no distinction is made between guaranteed wage and guaranteed employment.

History

Guaranteed wage plans are not new in American industry. The first plans in which employers assumed responsibility for providing work or wages for its employees was negotiated in 1894 between the National Association of Machine Printers and Color Mixers and the National Wall Paper Co. This company was an amalgamation which controlled 50 - 75% of the output of the industry. The company guaranteed eleven months' employment. Other plans were instituted in the brewery and textile printers industries in the decade of the 1890's. One of the better known and still existent plan is the Proctor

and Gamble plan which assured forty-eight weeks' employment to all workers with six months service. This plan was instituted in 1923. Other well know plans include the Nunn-Bush plan started in 1935, and the George A. Hormel and Co. plan, a meat packing concern, which was established in 1931. During the years 1938-1942 new plans were instituted at the rate of from nineteen to twenty-three a year. The survey of the Bureau of Labor statistics showed that by the end of 1945, a total of 347 plans had been introduced in the United States.

Extent of Guaranteed Wage Plans

The survey conducted by the Department of Labor showed that there were only 196 plans still in existence by the end of 1945 (19:6). The causes of discontinuance of plans of this nature are varied. Ninety-six plans were discontinued in Wisconsin as the result of circumstances attendant upon the passage of compulsory unemployment insurance legislation. In the remainder of the cases, discontinuance was caused as the result of special problems facing individual employers. Generally speaking, the state of business conditions at the time of discontinuance seemed to be a minor factor. Several plans were cancelled because of labor disputes.

The 196 plans presently in force cover a total of 61,000 workers. This is about 1% of the total work force of the country. The Department of Labor points out that the significance of the plans lies not in their prevalence but on

their provisions and accomplishments (19:9). The plans are most common in the food processing industry and the textile industry. Very few plans are in use in the basic or heavy industries. Outside manufacturing industries, the greatest number of plans was found in the retail trade group, in mail order houses, clothing and department stores.

It is to be noted that most of the currently operative plans are found in industries having seasonal variations in demand and production. The companies utilizing guaranteed wage plans are generally of small size. About 55% of the plans are in establishments employing less than fifty persons (19:10). However, there are three plans in companies employing over ten thousand people. Ten percent of the plans are found in companies employing one thousand or more people. One hundred thirty of the plans were found in unionized companies, and sixty six plans were in companies which are not unionized. Over 70% of the plans are found in the Middle Atlantic and Great Lakes regions. Very few are found in the South or the West. Most of the plans guarantee employment rather than wages. Most of the plans, 128, guarantee full year employment. The plans generally are based on the concept that the worker must be available to work when work is provided, and workers are not paid for voluntary or involuntary absences.

Results of the Plans

The greatest single result of operating under a guaranteed wage plan is the security given the worker. Other results include better labor relations, increased productivity, the attraction and retention of skilled workers, reduction of training costs and low turnover, and ease of recruitment of new employees. Many companies report that union security is enhanced.

Many companies reported that the increased costs of the plan were a disadvantage which was well compensated in increased benefits of the employer. One advantage in a competitive market is having fixed labor costs.

The Department of Labor reports that one-fourth of all plans introduced had been done at union behest (19:49).

CHAPTER V

SOME ASPECTS OF THE REPORT OF THE ADVISORY COMMISSION ON SERVICE PAY

The Commission and Its Mission

On 10 December 1948, the Hook Committee, named after the chairman of the Advisory Commission on Service Pay, submitted its report to the Secretary of Defense. This committee was directed by the Secretary on 9 February 1948 to perform the following (1:vii):

> Furnish me with a comprehensive study and with recommendations covering every significant phase of a sound system of compensation for persons at all levels, and in all branches, of the Armed Service, and also for those engaged in comparable rank in the Coast Guard, the Public Health Service and the Coast and Geodetic Survey.

The Secretary emphasized that thoroughness and completeness, although the problem was pressing and urgent, was more important than speed. The committee required ten months to gather and correlate the data and to reach its conclusions.

This report was presented to the eighty-first Congress as the basis for the establishment of a new pay scale for all the Uniformed Services. The committee has presented its findings in a list of thirty-three specific recommended changes.

It has been noted before that an incentive system must have as its base a fair, equitable scale of wages and salaries.

This, coupled with well administered personnel policies, form the foundations for an effective incentive program. Without either one, an incentive program will have little chance for success.

The Secretary of Defense in his memorandum dated February 9, 1948 said further (1:vii) "the Services need a system of compensation which will enable them to attract and retain their fair share of the best kind of men for all the many varieties of jobs in the several Services." It is obvious from the language of this memorandum that the present scales of pay are not fair and equitable.

The Commission had no members of the Uniformed Services in its roster. It interviewed people from all ranks of the Services, and engaged in research and special studies. This report is the thinking of prominent industrialists and businessmen. The purpose of this chapter is to study the findings of the Advisory Commission's Report. The most important aspect of this Commission's report is the fact that the survey and study was made.

The last comprehensive study of the pay of the Uniformed Forces was made in 1908 (1:ix). Since the enactment of the National Security Act of 1947 provided for a single National Military establishment, the Commission felt that "All persons within this organization be given an equal opportunity for pay and promotion according to their ability" (1:ix). Thus it is evident that the principle of uniformity, the basis

of all wage and salary administration in Industry, has been introduced. The goal of the Commission was to formulate an integrated policy which would attract and hold adequate personnel in the Services as regards both numbers and quality of manpower.

Some Basic Tenets of this Policy

An analysis of this report showed clearly that the Commission based its finding on some of the following principles:

1. The pay structure must serve the individual and the National Defense program.

2. It is based on the principle of uniformity.

3. There should be no inequities between the several services as regards promotion and pay. It did find the present pay for many grades inadequate.

4. Military compensation should be determined on amounts paid in Industry for comparable civilian responsibilities. This principle to cover officer and enlisted grades, comparable to management and the wage scales in Industry.

5. Personnel in the military service should receive a comparable amount of security as do their civilian counterparts.

6. Military personnel should have comparable opportunity as do personnel in Industry.

7. Compensation should be commensurate with responsibility, and should promote parity among the Services.

8. Extra pay and emoluments should be restricted to those actually performed in line of duty.

9. Retirement ages in many grades should be lower than comparable groups in Industry.

10. Pay is not the only satisfaction received for services rendered in a military career.

Recommendation 1

Recommendation 1 is quoted in its entirety (1:1):

> Basic compensation of all personnel of the Uniformed Forces on active duty should consist of basic pay, including length of service increments, and basic allowances for subsistence and quarters when authorized. The basic pay of all Service personnel should be based on the principle of pay for responsibility, and the amount should be related to the current rates of compensation in industry. In addition, basic compensation should be augmented by a limited number of special pays and allowances when specified activities or responsibilities are undertaken.

Findings

The Commission believes that the Uniformed Services in its need for technically trained officers and men is in direct competition with Industry. They have, therefore, correlated the pay of the military to that paid in Industry. The Commission states (1:1); "It is patent that no private industry comparison could be made with combat arms; however, the majority of Service personnel are not in a combat branch, and from within this group were selected and described and matched with their Industrial counterparts." The industrial

counterparts selected were in the eight fields of finance; transportation, construction, communications, selected manufacturing, warehousing and procurement, armament and mechanical equipment production, and shipbuilding. It is to be noted that these counterparts in Industry match up well with the staff corps in the several services. The line and field officers' compensation is not taken into account. The author feels that the combat officer is receiving prejudical treatment, and is paid on the same scale as staff corp officers who generally do not face combat in war, and in peacetime serve limited amounts of sea duty. The Commission recommends further, in Recommendation 9 (1:28), that "(1) Officers and warrant officers should receive no additional pay for sea and foreign duty, and (2) enlisted personnel should receive $15 per month in addition to basic compensation for each month of sea or foreign duty."

Part 2 of Recommendation 9 is certainly anomalous, since the Commission reports that since 1908, enlisted pay on the whole was about tripled, while officer pay was advancing on the whole by less than one half (1:9). The Commission noted that the scale adopted in 1946 averaged an increase over the 1942 scale about 12% for officers, 15-20% for higher grades of enlisted personnel, and 50% for the entry enlisted grade "further exaggerated the trend favoring enlisted personnel."

The Commission had this to say about compensation for military personnel (1:x); "Opportunity for promotion, types

of duty, recreational facilities, leave privileges, and many other factors are as important, if not more important, to the majority of the people as pay itself.' Possibly that concept may be valid for a young recruit seaman with no financial or family responsibilities; it is doubtful that the statement is valid for any married petty officer or commissioned officer. The experiences that group have undergone in the post-war inflated economy to make ends meet financially would further invalidate that statement. It is obvious that duty assignments, recreation, and liberty for the one term enlistee are important, and probably more important than monetary compensation. For the career service man or officer, a statement such as that previously quoted is debatable.

Pay Increases Since 1908

The findings of the Commission recall that since 1908, the percentage-wise increase in military pay for each grade is as indicated in Table IV.

It is noted that for the enlisted grades, the pay has been increased from 116% for the most senior grade to 400% for the most junior grade, which has been the most favored. By comparison, in the same period, officers pay has been increased from about 14% for the officers of flag rank, to 57% increase for the rank of Ensign. There has been a small percentage increase in the grade of Lieutenant Commander. Particularly during the pre-war years, it was the officers

TABLE IV

PERCENTAGE INCREASE IN PAY, 1908-1946

Grade	Enlisted Personnel Years of Service	Per Cent Increase Present	Proposed
7th	½	400	400
6th	1	344.4	358.3
5th	1	328.6	364.3
4th	5	218.2	309.1
3rd	10	154.3	246.2
2nd	15	159.6	234.6
1st	20	116.7	172.7
Rank	Officer Personnel		
Ensign	0	57.2	92.4
Lt. (jg)	5	38.1	77.3
Lieut.	10	28.4	70.0
Lcdr.	16	14.0	40.3
Cmdr.	22	30.0	58.2
Captain	27	30.9	64.1
R. Adm.	30	14.0	70.5

in this grade who commanded the smaller units of the fleet such as destroyers, submarines, and certain of the auxiliaries, and on capital ships and shore stations were the department heads. The author feels that this grade should have received a large percentage increase in pay during the course of years.

The New Pay Scale

The new pay scale is based on these premises (1:2):

1. A pay scale must have starting rates in each grade high enough to attract the desirable personnel.

2. Incentives should be provided for length of service, but should cease after a reasonable length of time. This

prevents lower levels of responsibility receiving rates of pay of the higher levels, thus removing the incentive for striving for promotion.

3. Differentials between grades should be greater than in-grade increases.

4. Increased responsibilities should be rewarded accordingly.

5. The pay scale should be based on the career expectancy of Service personnel.

6. "All periods of service creditable under existing provisions of law for base and longevity pay should continue to be credited for basic pay as recommended by the Commission."

The first five points are valid and are compatible with good wage and salary administration. However, point #6 is inconsistent. Present law does not grant credit for cadet or midshipmen duty at the Service Academies for longevity. Present law does give credit for R.O.T.C. training. This inconsistency of policy is not equitable under present laws; the Commission recommends that the latter should not be credited either. However, if persons are serving under military jurisdiction and discipline, and are considered a part of the organization, then fairness decrees this service should count for longevity. Using the same logic, then time spent by recruits in training should not count for longevity. The Commission does not recommend that this law be changed for

enlisted personnel, and certainly in Industry personnel in training programs start their seniority the day they enter training.

Range of Classification Levels

In Industry, practically all wage and salary administrations include a range of pay in each classification level. The purpose of this is two-fold; it permits increase for seniority and merit increases of pay. The merit increases are sound incentive measures which permit pay increases within a wage classification for reward to the better workers. Nothing of this nature is to be found in the pay scales as proposed by the Commission.

Although this pay schedule is allegedly similiar to those found in Industry, this is another case of marked inconsistency. This would have been an opportunity for the Commission to introduce a small incentive pay into the structure. In this manner, officers and men could have been motivated to produce more and perform their duties in a better manner, in the hopes of being recognized and rewarded. With restrictive rules placed on the number in each grade who could be eligible to receive in-grade increases for merit, it would be administratively possible to operate such a plan.

The Commission states further (1:7):

> The Commission recognizes the danger to the Nation of attracting to the Service those men whose prime motivation in life is personal gain rather than public service. There are dangers in developing

> a favored military class. The rewards of our military leaders in the past have been modest pay, security, and the affection and respect of the people. The Commission has not recommended pay scales for the military paralleling the civilian pattern in the highest brackets even though it believes that comparable pay scales at lower positions are sound.

It is obvious that in the past modest pay and security have been rewards of the topmost military leaders. However, in the past decade, with the exception of possibly a dozen of our topmost military leaders, "the affection and respect of the people" has been sadly missing. Radio commentators and news reporters continually refer to the high command of the Armed Services as "Army and Navy Brass." This phrase connotes little affection and less respect. With respect to security, the Commission recommendations on this facet of the pay structure would only attenuate the security which presently obtains in the retirement structure.

It is doubtful whether the Secretary of Defense, who ordered this Commission to investigate the pay situation, would now concur with the remark concerning "the affection and respect of the people." On Sunday, April 10, 1949, this leader of the Armed Forces was viciously attacked by a Washington columnist on a nation-wide broadcast as being "out of his mind and apparently has been partly so for some weeks" (34: 4-6). The Secretary of Defense had resigned his post on March 28,1949. This man had resigned his civilian duties at an annual pay of $180,000 to accept a $10,000 a year administrative job in Washington in 1940. Having worked hard and

conscientiously for 9 years, making decisions and bearing heavy responsibilities during the war and post-war years, this man was a real martyr to his government and his country. The diagnosis of his condition was described by the Commanding Officer of Bethesda Naval Hospital as follows (34:6):

> Mr. Forrestal at the present time has a marked low blood pressure, a secondary anemia, and a neuromuscular weakness which is characteristically seen in states of exhaustion. His condition is directly the result of excessive work during the war and post-war years. The only psychiatric symptoms present are those associated with a state of excessive fatigue. The physicians in charge of his case anticipate that a period of rest and medical treatment will result in recovery.

The report continues (34:6), "The damage, however, had been done. The propaganda-wise Russians had snapped up the Pearson story fast. Moscow papers spread the text of Pearson's broadcast over their front pages, extracting full value from the implications of Pearson's sensationalism." This then is the affection and respect of the people. Similar treatment received by Generals Vandergrift, Patton, and Mitchell to mention only a few of our outstanding military leaders, invalidate this concept of the Commission.

The political enemies and newspaper opponents which any military leader creates are bound to influence the thinking and respect of the public at large, as these groups directly influence public opinion.

Returning to the subject of comparison of civilian and the proposed military compensation, the results are as found

in Table V. These amounts are scaled figures transposed from the chart provided by the Commission (1:21), and are very close approximations.

TABLE V[a]

COMPARISON OF CIVILIAN AND PROPOSED MILITARY YEARLY COMPENSATION

Grade	Enlisted Range	Civilian Range
7th	2196	2136 av.
6th	2500-2875	1750-3000
5th	2625-3250	2000-3125
4th	2750-3875	2500-3625
3rd	2125-4250	2625-3875
2nd	2500-4500	2750-4000
1st	2750-5125	3250-4750
Rank	Officer Range	
Ensign	3750-4750	No Comparison
Lt. (jg)	4500-5625	3,250-8,000
Lieut.	5,275-6,250	4,250-8,000
Lcdr.	6,250-7,750	5,000-11,750
Cdr.	7,250-9,500	4,500-19,750
Captain	8,750-9,875	6,000-22,750
R. Adm (Lower)	11,625-12,750	15,250-27,250
R. Adm (Upper)	13,875-14,375	25,000-39,250

a. Military Range: Lower Limit (officers, base pay plus allowances without dependents; enlisted, base pay (including found, value 108). Upper Limit (officers and enlisted Grades 1-4, base and maximum longevity pay plus allowances with dependents; enlisted Grades 5-7, base and maximum longevity pay.

Civilian Range: Limits represent lowest and highest rates reported in survey for comparable civilian positions.

Comparing the enlisted pay scale with that found in Industry, in the lower grades the military minimum rate is higher with the exception of pay grades 3, 2, and 1. The maximum earning rate for enlisted personnel is higher in all grades with the exception of pay grades 6 and 5, and very little disparity exists there. The maximum earning rate in pay grades 3, 2 and 1 is higher. A disparity of $400 exists between the two scales, with the enlisted personnel rate in the more favorable position.

In comparing the officer pay rates and their civilian counterparts, it is shown that the military minimum rates are higher in all cases with the exception of the flag rank. However, a great disparity exists between the upper limits of the two pay structures. Varying from a minimum of $1,250 in the grade of Lieutenant and rising at positively accelerated rate to the flag rank where a difference of $25,375 is found.

It has long been a by-word in the Navy that the best pay grade is pay grade one, the grade of Chief Petty Officer. This grade by comparison with all other pay grades, both officer and enlisted, receives the maximum pay with the minimum of responsibility. The recommendations of this Commission does not change this condition.

Special Compensation

There are about fifty separate special pays in the Uniformed Services. However, this discussion will be concerned

with only two of the hazard-incentive special pays, submarine and flying duty.

At the present time, both of these duties receive a 50% increase of base pay as an incentive for personnel to enter these duties. Prior to World War II, submarine officers received a 25% increase of base pay, and qualified submarine enlisted personnel received $25 additional per month. Aviation personnel have received the 50% differential for many years.

Proposed Hazard Incentive Rates

The Commission has recommended the following rates of incentive hazard pay for flight and submarine duty be instituted:

TABLE VI

RATES OF HAZARD INCENTIVE PAY

Officer Personnel		Enlisted Personnel	
Grade	Pay per Month	Rate	Pay per Month
Captain	210	Grade 1	75.00
Commander	180	Grade 2	67.50
Lieut. Comdr.	150	Grade 3	60.00
Lieutenant	120	Grade 4	52.50
Lieutenant (jg)	110	Grade 5	45.00
Ensign	100	Grade 6	37.50
Warrant Officers	100	Grade 7	30.00

At first glance it would appear that these hazard-incentive pay rates would decrease greatly the extra compensation received. Actually, there would be little reduction

of pay and in the case of Lieut. Commander there will be an increase of total compensation received. In the enlisted personnel, this group would receive a reduction in incentive pay of about 15%.

The Commission justifies the higher hazard rate of pay on these grounds (1:27):

1. Special pay must be in proportion to basic pay.

2. Officers are generally ordered to greater special responsibilities than enlisted personnel on hazardous assignments.

3. With respect to flying particularly, death rates for enlisted personnel have been consistently lower than for officers.

<u>Sea and Foreign Duty Pay</u>

The Commission, in Recommendation 9, recommends that additional pay for sea and foreign service duty be abolished, while at the same time the pay for enlisted personnel should be set at $15 per month for each month spent at sea or in foreign duty.

To follow the logic of the Committee's thinking on this subject, its position is quoted in full (1:28,29):

> The Commission has concluded that sea duty for naval personnel, as well as oversea duty for the Army or Air Force, although probably involving more inconvenience than military activity ashore or at home, is a part of their normal career. As such, it does not parallel the highly unusual foreign assignment in industry or the Federal Civil Service for which an incentive premium is offered. Even here, the top administrator receives relatively little extra pay for an oversea position. Officers, especially, do not deserve extra pay for this type

> of duty, since the pay recommended for them is apportioned to their relative responsibility as executives and administrators, regardless of their site of operation. Additional compensation is unnecessary and undesirable for work which should be expected as a normal incident in a chosen career. Unusual expenses incurred by virtue of foreign or sea duty may be reimbursable under the Post and Duty Allowance recommended by the Commission.
>
> For enlisted personnel, the Commission proposes a flat rate increase, as in keeping with accepted industry practice for disagreeable or unpleasant work and as a morale factor. A percentage of pay increase for these duties bears no relation to the inconvenience felt by the individual nor is the unpleasantness in proportion to the grade or rating.

The Commission is basing its recommendations on a comparison of salaries and wages paid in Industry. It was stated earlier that the industries the Commission took as its models matched well with staff officer duties and responsibilities but not much consideration was given the line officer. The Commission states that Industry grants incentive pay for overseas assignments, but for the naval officer, this is to be considered part of career activities, and the site of operations is not to be considered.

When considering enlisted personnel, the Commission states that in keeping with industrial practice in paying for disagreeable and unpleasant work, and as a morale factor, it recommends the additional pay of $15 per month for sea duty.

<u>Retirement, Severance Pay, and Death Benefits</u>

In its introduction to this phase of its findings, the Commission states that a retirement plan could be urged for these reasons (1:30): As an attraction to get the best men in the Services, to fulfill the Government's social obligations to its employees, as an administrative aid to separate the unfit, and in meeting the superannuation problem. However, the Commission denies all except the last reason. It claims the only valid reason for a retirement program is to handle the superannuation problem.

The main thesis of its plan is that if the pay scales are comparable to those paid in Industry, then by a priori logic the retirement benefits should be comparable. In the April 9 issue of the Army-Navy Air Force Register (4:1), the report of the Naval representative who defended the views of the Navy on this subject was stated. It gave the complete report of the remarks of this officer when he appeared before the Armed Services Subcommittee of the Congress which was investigating the recommendations of the Hook Commission. This presentation was too long to record here, but it described completely the logic and eighty year history of the naval retirement system.

The recommendations of the Commission on this subject were six in number. Not all will be included in this discussion.

It was stated previously that the personnel policies of the Navy are often vacillatory in nature. In 1947, the law relating to voluntary retirement was changed, permitting officers to resign after twenty years commissioned service; prior to this time thirty years service was required. This change was effected for several reasons. It gave an added inducement to reserve officers to accept a commission in the regular Navy; and more important, it permitted officers to resign after twenty years service to prevent stagnation of promotion. The rapid rise in rank occasioned by the war advanced many officers years ahead of the normal rise through the intermediate ranks. As a result, many officers presently in the rank of Commander would have had to spend twenty years or more in the ranks of Commander and Captain, excepting the very small percentage which would be selected to flag rank, if the thirty year service requirement were maintained. To remove this hump, earlier voluntary retirement was logically reduced to twenty years. It could be expected, too, that the physical and mental drain on these officers occasioned by the war would reduce their effective service in the Navy after twenty years.

However, the Commission does not consider this reasoning valid, and in Recommendation 25, advises that voluntary retirement should not be permitted until after thirty years

commissioned service, or the right to retire after twenty years service if age sixty has been reached.

The Commission recommended that the retirement plan should be non-contributory with all costs being met by the Government on a pay-as-you-go basis, that is, without funding. This recommendation was based on the fact that the Government, contrary to Industry, has the power to tax; that any special funding would serve no useful purpose and only introduce needless bookkeeping. At a press conference in Washington, in March 1949, the President of the United States recommended that all Uniformed Service personnel have 6% of all salaries withheld to defray the cost of the retirement plan, that is, a contributory plan. In light of the fact that the low salaries paid military personnel have been ascribed to the fact that it was helping to pay for the retirement plan, these diametric views are irreconcilable.

The payment of severance pay or short term benefits for those persons involuntarily separated from the Service is sound. The Personnel Act of 1947 stated the policy that unqualified and misfit officers should be separated from the Service as early in their careers as possible, so as to permit them to start another career in some other field while still young and vigorous. The previous policy had been a steady attrition of officers by the selection system. Thus many officers would be involuntarily separated from the Service after having devoted the productive years of their lives to

the Service and would be too regimented in a Naval career to be successful in some other civilian pursuit. A naval officer, after spending ten to fifteen years in the naval service, develops few skills which can be transferred to a civilian pursuit. Only after post-graduate study is he qualified to enter some civilian pursuit, and if he has spent many years in the Service, his services are not desired by many companies. He is past his prime and is not considered a good investment by most companies.

The Commission recommended that enlisted personnel be granted a retirement program comparable to that enjoyed by officers. It would appear that this recommendation is not only sound but eminently fair.

Disability Retirement

The biggest change recommended by the Commission is that one affecting disability requirements.

Under present laws, personnel retired because of physical disability are retired with 75% of base pay in the grade then serving. This pay is tax free.

The Commission has offered these changes to the present laws (1:46):

> (2) . . . . (Those separated from the services for disability of less than 30 percent should receive severance pay as computed under Recommendation 28, with a minimum of 3 months full pay, or a service retirement benefit, if eligible under Recommendation 25 B or 26 B).

> (3) Periodic physical examinations should be made during the first 5 years of retirement for disability. If during the 5-year period the person is found physically qualified for active duty and has not reached age 60, he should be returned to active duty; if not found qualified for active duty, determined as of the end of the 5-year period, and the person has had 20 years of service, including time spent on disability, and has reached age 60 for officers, or age 50 for enlisted personnel, during the 5-year period, he should be reclassified to a service retirement status.
>
> (7) Persons eligible for voluntary service retirement, who are removed from the active list by reason of disability, should have retired pay computed and paid under the service retirement provisions. Such removal should be deemed a service retirement.

Previously, the degree of disability did not affect the amount of retirement pay. It is noted that by paragraph (2), severance pay only would be granted.

The security generally spoken of as regards a career in the naval service is what the Commission now proposes to remove by law. The security given naval personnel was the knowledge that if they were rendered disabled from any cause, the retirement benefits would at least provide a very modest living if they were unable to take up other pursuits. Consider the fact that for years the Navy has offered this as an inducement and an incentive to make the Navy a career. This security, were it summarily removed, would remove the best incentive the Navy presently has.

It is noted in paragraph (7) that if a disabled person is eligible for a service retirement at the time of his disability, he should be retired under the service retirement provisions.

Continued Study of the Problem

The Commission, in Recommendation 30 (1:52) suggests that continued study of personnel problems in the services, including a current review of the proposals of this Commission, be undertaken in the office of the Secretary of Defense. This is obviously of great import at this time, and the recommendation is a wise and sound one.

It is obvious that the problems of the Commission were complex. By some of their recommendations, they would remove many inequities which have long existed in the Uniformed Services. However, it would appear to the author that some of their recommendations would introduce policies which are in themselves unsound and ill-advised.

It does not seem sound to group combat services, protective services, and medical services under the same uniform compensation plan. The job analysis of a combat man reveals one all pervasive factor, namely, to kill. That is what he is trained for, his mission and his only reason for being. It is not found in any job analysis in Industry. The hours, the working conditions, the inconveniences, and the impermanence of home life, do not have a similiar counterpart in Industry. In this instance, by trying to resolve a wage and salary policy comparable to one in Industry, the Commission has been illogical and unfair to the line and the field officers and men of the combat services. The Commission apparently has not grasped the concept that life at sea is still dangerous

that an officer is on duty at all times, and that the working day at sea requires about 16 hours under normal circumstances.

It would seem to have been more logical to have drawn up a pay structure for the Combat Services, one for the Health Services to include all the doctors now presently serving in the Uniformed Services, and a third for the protective services of the Coast Guard and Coast and Geodetic Survey.

However, the most encouraging aspect of the entire report is the fact that the work has been done, and that a continued study may be made of this complex problem. It is one which requires such a continuous analysis and study.

Effect of the Present Pay Structure

The inadequacy of the present pay structure is reflected in the resignations submitted. In Table VII (9) are shown data on male officer resignations submitted to the Navy during the period 1 March 1948 - 1 March 1949:

TABLE VII

RESIGNATIONS SUBMITTED DURING PERIOD
MARCH 1948 - MARCH 1949

	USNA GRADUATES		NON-USNA GRADUATES	
	Pay	Other Reasons	Pay	Other Reasons
Resignations Accepted	36	73	45	112
Resignations Disapproved	54	74	18	40
TOTAL	90	147	63	152

An analysis of Table VII shows that for Naval Academy graduates, 48% of the resignations submitted were based on economic reasons, whereas for non-Naval Academy officers, 29.3% of the resignations submitted were based on economic reasons. It is interesting to note that of the 237 resignations submitted by Naval Academy trained officers, 128 or 54.1% were disapproved. However, for the 215 resignations submitted by non-Naval Academy officers, only 58 or 27% were disapproved. Thus a Naval Academy graduate has just 50% as good a chance to voluntarily separate himself from the Navy as does a non-Academy graduate.

In Table VIII (10) are shown data which break down the resignations accepted during the period 1 July 1948 to 1 April 1949. These data include resignations accepted from naval nurses.

TABLE VIII

REPORT OF RESIGNATIONS ACCEPTED BY CORP
JULY 1948 - APRIL 1949

Rank	Line	Medical Corp	Dental Corp	Supply Corp	Civil Engineer Corp	Chaplain Corp	Nurses Corp	Total
Ensign	132	0	0	16	1	0	113	262
Lt (jg)	85	2	0	8	1	4	43	143
Lieut.	40	0	0	9	1	2	89	141
Lcdr.	23	1	0	3	1	5	0	33
Cdr.	5	0	0	2	0	0	0	7
Warrant Officer	0	0	0	2	1	0	0	3
	285	3	0	40	5	11	245	589

An analysis of the 589 resignations accepted shows that the Line had 48.4% of the total, the Supply Corp 6.8% and the Nurse Corp 41.6%. The high percentage of nurses' resignations was probably caused chiefly by marriages. It is apparent that most of the Staff Corps are satisfied with a naval career, whereas the line is by comparison much less satisfied with the Navy as a career.

Regulations governing officers resignations are laid down in the Bureau of Naval Personnel Manual, 1949 (7:249). Article C-10336(c) states, "An officer submitting his resignation will include in the letter submitting it the precise reason for submitting the resignation."

These reasons, with amplifying remarks, follow:

1. Pay: This includes reasons involving either comparative or absolute statements concerning monetary returns. It includes statements of availability of a civilian job at higher pay, insufficiency of Navy income, criticism of financial prospects in the future, or any other reason which reflects dissatisfaction with the pay or the pay scale of the Navy.

2. Promotion: This includes reasons involving dissatisfaction with or criticism of the prospects or plan of promotion in the Navy. It also includes statements involving professional development in the case of Staff Corps personnel.

3. Home Life: This includes reasons relating to instability of home life, deprivation of home life, family obligations, care and up-bringing of children, dependents social welfare, housing difficulties, and domestic discord. It also includes statements concerning the health or welfare of dependents or parents.

4. Personal Incompatibility: This includes statements which declare or imply unhappiness or dissatisfaction with regard to naval life or professional

interests. It also includes stated lack of interest in a naval career, a desire for freedom, temperamental and maladjustment, or a preference for the civilian way of life.

5. Education: This includes all statements of desires or plans for further civilian education.

6. Physical Complaints: This includes statements which declare a lack of physical fitness or a physical ailment which is aggravated by naval service.

An analysis of 100 resignations ascribe the reasons for resigning as shown in Table IX:

TABLE IX

REASONS FOR RESIGNING FROM U. S. NAVY

Reason	Number	Reason	Number
Pay	29	Personal Incompatibility	45
Promotion	14	Education	17
Home Life	59	Physical Complaints	4

It is evident that pay, lack of home life, and the difficulties attendant upon a naval career are the chief sources of dissatisfaction.

An analysis of this data shows how important the home life factor is in the total satisfaction in a naval career. This aspect of the working conditions attendant in a naval career were possibly not given much weight by the Commission in its study of the problem.

CHAPTER VI

INCENTIVES IN THE U. S. NAVY

Before examining the incentives presently in use in the U. S. Navy, it is necessary to study the personnel who are entering the Navy today as recruits.

General Omar N. Bradley, U. S. Army, in an article written for publication in an American magazine (6:14) quoted an eminent psychologist's analysis of the new Army recruit: "The postwar soldier is younger than his wartime brother, healthier, better schooled, and more adept at learning. He is also plainly undisciplined, jealously aware of his rights but not of his responsibilities. Moreover, he is mercenary and antagonistic to authority in almost any form." General Bradley was at that time the head of the Veterans Administration. It is safe to say that the same analysis will apply to the present-day Navy recruit, as the source for both is the same.

This, then, is the product of our times, the clay which the Navy receives to mold into a disciplined, alert, capable man o'warsman. To mold, at the same time, into a better citizen is part of the goal. This is a real challenge to the officers and men of the Navy.

Another question which should be answered is why do men enter the naval service? A survey (11) conducted in 1947 recorded the reasons most frequently given by new recruits why they entered the service: trade training, 39.6%; travel and adventure, 38.2%; to get away, 20.7%; pay security, 15.3%. In the author's experience reason one and four reflect some maturity and the effectiveness of the Navy's recruiting propaganda. However, reasons two and three reflect the immature thinking of some of the new recruits. Those who enter to get a trade training, having a well defined goal, will probably be the least troublesome. It is this group generally who apply themselves, work hard, and are not disciplinary problems. It is this group which the Navy would like to develop into career enlisted men. It is the people of this group who have to be sold the Navy way of life. If they do reenlist, the personnel of this group usually develop into excellent men.

The group who are attracted to the Navy for pay security alone take the middle of the road. They generally provide no special problems, are easily satisfied, and are excellent models of mediocrity. The personnel who enter the service for travel and adventure, or just to get away, are generally as happy as the Navy is when the end of their enlistment arrives. The immaturity of this group makes them easily dissatisfied, the grumblers and shirkers, and the poor producers. It is this group who are usually the disciplinary problems.

<u>Security</u>

The security offered in the Navy is presently of a higher order than Industry can offer. All the personnel in the Navy, both officer and enlisted, are salaried personnel. Although it is lower for the officer group than for comparable positions in Industry, the fact of guaranteed wages for fifty two weeks of the year cannot be equaled by Industry. It has been pointed out that only about 1% of the laboring force in Industry is covered by guaranteed wage plans.

Organized labor is seeking sick benefits which include hospital insurance, surgical insurance and the like. All naval personnel are hospitalized when necessary, and adequate medical care can be received at any ship or station without cost. All pay and allowances continue whether on full duty or on limited duty. Full dental care is also provided for all naval personnel.

In the event of a disability which prevents further naval service, pensions are provided. However, this incentive to enter the Navy for a career will be greatly reduced if the Hook Committee recommendations are followed. This has always been one of the strongest incentives for entering the Navy as a career. However, with the introduction of the severance pay concept. this incentive will be diminished.

Industry has begun and in many cases has overtaken the Navy in its pension system, particularly for the executive positions. However, few industries can compete with the

pension plan for enlisted personnel. The Bureau of Naval Personnel in one of its recruitment pamphlets (8:5) has estimated that to provide the pension a Chief Petty Officer receives after twenty years service would require the purchase of an annuity costing $32,000. After twenty years service, and upon transfer to the Fleet Reserve, a Chief Petty Officer receives retired pay of $107.25 per month. At present, the mine workers receive $100 per month from the Mines Welfare Fund administered by the United Mine Workers of America upon reaching age sixty; this is exclusive of social security. Considering the fact that members of the Armed Services are not eligible for social security, the disparity existing between pensions in Industry and in the naval service will soon be bridged. If the Unions win pensions from private Industry, then these pensions, coupled with social security and old age pensions, would soon outstrip the benefits received from naval pensions.

Officers can presently retire from the U. S. naval service after twenty years service, at 50% of the base pay. This does include longevity, but does not include rental, subsistence, or any other allowances.

Another sense of security is granted naval personnel by always being provided food and living space. This does not include dependents, but for many enlisted personnel, this factor is of great value.

Other Incentive Pays

The naval service offers incentive pays for special duties and services. Submarine and flight personnel receive 50% of base pay extra as compensation for these types of duties. Deep sea divers, personnel serving at sea or foreign duty, and submarine rescue personnel receive extra compensation when engaged in these duties.

Enlisted personnel who serve as messmen are paid $5 per month extra while so acting in that detail (7:A4310).

Enlisted personnel receive $2 per month extra compensation for each award of any of the following medals: Medal of Honor, Distinguished Service Medal, Distinguished Flying Cross, Navy Cross, Navy Silver Star Medal, and the Navy and Marine Corps Medal (7:A4307).

Enlisted personnel who are qualified in the arms which they may be required to use may be paid not in excess of five dollars per month of extra compensation (7:A4308).

Feeling of Belonging

Industry tries to engender a feeling of belonging to its workers. Most companies today enter the community life where their plants are located. Many companies have educational programs to more clearly identify the workers with his work and the entire organizational structure of the company. Many companies hold annual open-house at their plants so the workers can be host to their families and the community.

The plant newspaper is sent to the homes of the workers, enabling the entire family to have a feeling of being a part of the company. New workers are generally assigned to an older worker who will introduce him and make him feel at home in his new environment. All of these techniques are used in whole or in part by most forward thinking companies to make their employees feel at home and part of the organization.

As stated earlier, the uniform itself engenders a feeling of belonging. However, with all the men eating, sleeping, and working together, the Navy has a big advantage over Industry. Good leadership, fair personnel practices and treatment, are necessary to develop this feeling into one of production and cooperation. The naval officer who feels that men in the Navy do not band together informally as men do collectively and formally in Industry is laboring under a misconception. There can be as much restriction of output in the Service as is done in Industry. Some naval officers only recognize cliques when they appear among the discipline violators. Informal social groupings exist throughout the Navy, and they can be a force for good or evil. In this restricted sense, there is a collective force in the Navy.

Mobility and Promotion

The mobility for enlisted personnel is as good in the Service as it is in Industry. No statistics could be found to compare the average time required to reach foreman status in Industry and Chief Petty Officer status in the Navy.

Prior to the war, it usually required the average man from twelve to fourteen years to reach this rate. It is believed that promotions in Industry are not as rapid as are found in the Navy.

The promotion rate for officer personnel is not as rapid as for enlisted personnel. Under normal conditions an officer can expect to spend the following years in each grade as indicated in Table X (7:C7102):

TABLE X

NORMAL TERM OF SERVICE OF LINE OFFICERS

Grade	Service in Grade (years)	Total Commissioned Service (years)
Captain	5	30
Commander	7	25
Lieutenant Commander	6	18
Lieutenant	6	12
Lieutenant (junior grade)	3	6
Ensign	3	3

If it is assumed that the average age of an officer at first commissioning is 23 years, an officer will be forty-eight years old before he reaches the rank of Captain. Officers must be of this grade to command capital ships, shore stations, or squadron commander of destroyers or submarines.

Character and Nature of the Work

Work in Industry is usually repetitive and routine. Work in the Navy is varied, generally interesting, and in

many cases more meaningful. This latter fact is most obvious in the machine shops of our shore establishments engaged in ship repair work.

No comparative survey has been made in the Navy as was done in Industry by the Fortune Poll in 1947. A poll of factory workers disclosed the following information: 43% reported their work was interesting nearly all the time, and 34% reported their work was interesting most of the time. Only 14% reported most of their work to be dull and monotonous, and just 6% reported their work to be completely dull and uninteresting.

One factor of navy work to augment its interest is the travel and changing situations one continually meets. Visiting new ports, war games, shake-down and training cruises add a variety to the work which Industry is unable to match. However, this continuous change is not advantageous for a small segment of the Navy population. The older a person gets, or the more home responsibilities he has tends to make a nomadic existence less desirable. For some it weakens their sense of security (23:236).

<u>Quality of Supervisory Leadership</u>

A comparison of the quality of the supervisory leadership in Industry and the Navy is difficult.

"Factory" (14:82-88) conducted a survey of factory workers in 1948 to determine their attitudes on various subjects.

On the question of leadership, 57% rated their foremen good, 32% rated them as average, and 9% rated their foremen as poor. On the subject of "knowing his stuff," 81% said he did and 13% said he does not know much, while 6% had no opinion.

No comparable information could be found regarding how enlisted personnel feel about the Chief Petty Officers and the Division Officers who have immediate supervision over them. However, it has been felt in the Navy that the quality of leadership displayed by these two groups is not up to pre-war standards. The present petty officers in the Service do not have the training experience and seasoning which their pre-war predecessors had. The same comments would apply to the junior officers in the Navy. This is one area which the Navy has tried to correct since the war. However, in the main, this leadership is generally considered good and is improving since the close of the war. Prior to the war, a close and amiable relationship existed between the Division Officer, leading petty officers, and the men in the division.

<u>Ship Service and Commissary Store Privileges</u>

It has been the practice of many companies to conduct stores for their employees, to sell them company products at cost, or to permit the company purchasing agent to buy merchandise at considerable discount for company employees. Many companies have reported varying amounts of these services offered to their employees. The biggest criticism has

always been from retail merchants located near the company operations or community where the majority of the employees lived.

The Navy has offered these services to its personnel in a much more expanded program. Aboard ships it has canteens and ship stores where many articles of necessity and comfort are sold. At most of its shore establishments it conducts Navy commissary stores where household staples, meats and groceries are sold. Ship service stores also stock items of clothing, necessity and luxury items.

Prior to and during the war, naval personnel effected great savings by purchasing through these outlets. Since the war, the commissary and ship service stores have been of little benefit to naval personnel. The selling prices of most items are comparable to those found in normal retail outlets, and on some items, the prices are higher than those found in civilian stores. The best commendation for their continued existence is for the convenience of naval personnel and their dependents.

As was to be expected, since the war the retail merchants associations near Navy commissary stores and ship services are clamoring that these services are in direct competition with them, and should be closed. The continued existence of these functions is now up to the Congress, and it is possible that many of them may be closed in the near future.

If this should happen, another service will be lost to naval personnel. The convenience and economy of naval personnel will suffer thereby. These services in the past have been of great monetary benefit and convenience to this group, and are a definite benefit to naval personnel and their families.

Strangely enough, many officers' clubs which are now open to the Reserve components of the services are subject to the same criticisms, i.e., operating in direct competition with restaurants, cocktail lounges, and other places of entertainment.

Guaranteed Annual Wage

It was noted that only one per cent of the total work force of the nation is covered by this type of guarantee. All officers and men in the naval establishment are salaried personnel, and are in effect, operating under a guaranteed wage plan.

Holidays

Industry in the main grants six paid holidays per year. Navy regulations (41:Art.2186) state that the 1st of January, 22 February, 30 May, 4 July, Labor Day, 11 November, Thanksgiving, 25 December, and any other National holiday as directed by the President will be observed as a holiday in the Naval establishment. This is a total of eight holidays compared to the average of six paid in Industry.

However, naval personnel in a duty status on holidays do not receive premium pay as is the industrial practice.

Paid Vacations

It was found that there are a wide variety of paid vacation plans in Industry. In the Navy, officers and men are allowed $2\frac{1}{2}$ days per month's active service per year (42: Art.1283). Thus, for each year of service, thirty days' leave with full pay and allowances is allowed. This plan is more generous than Industry presently offers.

In the past, Navy officers and men were not given the opportunity to take advantage of leave each year. However, the present policy of the Navy Department is to encourage officers and men to take their full allowance of leave each year.

Sick Leave

Personnel in the Navy who are sick or disabled are given full medical treatment at no charge. Full pay and allowances continue while in this status. If recuperation leave is found necessary, this leave does not subtract from the annual leave allowance.

In comparison to the plans that Industry presently has, the sick leave plans of the Navy are more generous.

CHAPTER VII

INCENTIVES IN INDUSTRY ADAPTABLE FOR USE IN THE NAVY

Introduction

In April of 1947, Senator Henry Cabot Lodge proposed that a complete investigation be made of the organization of the United States government. The result of this proposal was the formation of the Commission on the Reorganization of the Executive Branch of the Government. This Commission had as chairman former President Herbert Hoover. This Commission has forwarded to Congress eighteen reports and twenty-five other summations by "task force" specialists who had investigated every agency of the government. The cost of this Commission's work has been estimated to date to be $1,900,000 (35:2). Its purpose was to reorganize all agencies of the government to operate in the most efficient manner possible.

In the course of his investigation, Mr. Hoover has charged the Armed Forces with inefficiency, extravagence and waste (34:6). In another charge, Mr. Hoover is quoted as saying (35:3); "The soldier sometimes has little appreciation of how hard it is to earn a dollar." This same statement would be true if he had substituted sailor or naval officer. The disregard some officers and enlisted personnel have for

material, tools, and public property in general is of a high order. In the opinion of the writer, the waste and misuse of manpower by some officers and petty officers is deplorable. In the course of this study, the following information was found (21:3):

> Since 1914-15 there have been riders attached to the Army, Navy and Post Office Appropriation Bills specifying that no part of the appropriation shall be available for the salary or pay of any officer, manager, superintendent, foreman or other person or persons having charge of the work of any employee of the U.S. Government while making or causing to be made with a stop watch or other time-measuring device a time study of any job of any such employee between the starting and completion thereof, or of the movements of any such employee while engaged upon such work; nor shall any part of the appropriations made in this act be available to pay any premiums or bonus or cash reward to any employee in addition to his regular wages, except for suggestions resulting in improvements or economy in the operation of any government plant; . . . . (Public Law 441-77th Congress).

This rider on the appropriation bills would tend to substantiate the statement of Harold Davies, Laborite member of Parliament. Mr. Davies is quoted as follows (36:2): "There is only one difference between England and the United States--you have bad politicians and good businessmen whereas we have good politicians and bad businessmen." In effect, by this rider the Congress would tend to put a penalty on efficiency.

Profit Sharing in the Navy

It is believed that this technique is adaptable to the Navy. It is proposed that it should be tested in this fashion.

The plan must be pretested on a small group of vessels to determine its feasibility. Through the course of the years, the Navy has accumulated data on just how much it costs to run a naval vessel, say a destroyer or a submarine. It knows the cost of maintenance of the engineering plants, the replacements of parts, and the expendable supplies and tools needed to run these vessels. With a careful compilation of these data, it could set the budget cost for maintaining and operating each vessel in the Navy. For the engineering departments, factors would have to be calculated for miles steamed and for days in port. The competition would include all the departments of the vessel, and the budget would include a schedule based on all title "C" items. Not to be included in the budget would be the payroll for the officers and crew, nor the ration allowance. The particular reason for not including the latter is the fact that some over-enthusiastic supply officers might try unwisely to save too much money on food.

After calculating what it has cost in the past as an average to run each type of vessel, the standard should be set at about 80% of the total cost in the past. The reason for this being to permit raising the standard in the future if experience later tended to validate this action. It should also prevent "rate-cutting" if the results should prove too advantageous to the crew. This is often a complaint of organized labor working under incentive systems. As postulated

earlier, this plan should be tested on only one vessel in each class before it is accepted as policy for all vessels in the Navy.

The period of operation should span from the end of one overhaul period to the beginning of the next overhaul period, generally eighteen months. The difference between the estimated and actual cost to run the vessel for that period would be the "profit" to be shared. If the actual cost were larger than the estimated cost, then there would be no profit. All hands would share in a "share and share alike" basis. This would give each crew member an equal interest in the economical administration of his ship.

Advantages for Profit Sharing

It is realized that this concept is a radical departure from the present cost administration of naval vessels.

However, the following advantages could be predicted to accrue to a plan of this nature:

1. It would prove to be the basis for one of the largest educational programs in the Navy. Too few officers and men know or appreciate the vast sums required to operate and maintain the vessels of the Navy.

2. It would make the officers and men of each vessel cost-conscious. In the promotion of each individual's self-interest under a profit sharing plan, he would want to know the cost of each operation in a ship's daily routine.

3. Communications both down and up in a ship's organization would be facilitated under profit sharing. The desire for information would come from the bottom, and recommendations would start at the bottom of the line and work up.

4. A greater feeling of togetherness would be engendered. Each person would be a member of a cooperative effort and each person would know himself to be a vital and necessary member of the ship's organization. Real esprit de corp should result.

5. Enlightened self interest would dictate a policy of cooperation of all hands. The reasons for many procedures in the service would be more understandable to the enlisted personnel.

6. Inefficiency, lost motions, and wastage would be reduced.

7. Work would become more meaningful for many of the officers and enlisted personnel.

8. A value would be placed on the man-hour, and much waste of manpower would be eliminated or avoided.

9. Profit sharing would result in no extra cost to the government; in fact, it would result in lower costs to the government, by setting the standard at least 20% below present costs.

10. The shares distributed to each member of the crew would augment the regular pay received, and enhance the standard of living of each member of the Service.

11. A system of merit rating could be administered more equitably.

12. More dignity would accrue to each member of the crew. The desire for status, as the importance of each persons' duties would be more clearly defined, would be satisfied.

It is to be realized that permission to institute or even investigate profit sharing in the Navy would have to be approved by the Congress. Since so many advantages would accrue to such an operating plan, it is worthy of further investigation.

Suggestion Systems

It would appear that suggestion systems could legally be introduced into the naval service. From the previous study of this system in Industry and its phenomenal success particularly during wartime, immediate institution of this plan is recommended.

The same advantages claimed for the institution of suggestion systems in the industrial situation apply with the same force to the naval situation.

The same guiding principles for the successful operations of a suggestion system in Industry are applicable to the Navy.

Awards

The awards for accepted suggestions should be given careful consideration. The award committees should represent

both the officer and the enlisted group.

Competition could be set up for ship, force, fleet and all-Navy awards. Commanding officers would be the final authority for ship awards, and standardized regulations would be required to introduce uniformity and fairness in the distribution of awards. Prizes could include up-grading for enlisted personnel, special liberties, leave, cash awards, special recognition in the ship's paper, and notations in service records.

From the savings effected as a result of suggestions received in Industry, it is believed that the administration of a suggestion system would not result in extra cost to the government. From Industry's experience, it should result in definite economy for the U. S. Navy.

Conclusions

In view of the current emphasis on economy and efficiency in governmental departments, the profit-sharing plan and the suggestion system program should be thoroughly investigated by the Navy, and if found operable, thoroughly tested on a small portion of the Navy. If the results of this experimental group prove the validity of these concepts, these plans should then be instituted in all branches of the naval establishment.

CHAPTER VIII

SUMMARY AND CONCLUSIONS

Summary

1. In the United States today approximately fifteen thousand firms have profit sharing plans installed.

2. The greatest growth of profit sharing occurred during the past decade.

3. Approximately 53% of all profit-sharing plans which have been inaugurated are successful.

4. Companies currently operating under the profit-sharing principle are better situated financially to meet the new demands of organized labor regarding health, hospital, and disability benefits and pensions than most companies not operating on this principle.

5. Suggestion systems in Industry were installed as early as 1898.

6. During World War II, 93% of the companies reporting to the War Production Board had suggestion systems in operation.

7. Suggestion systems have resulted in better labor-management relations, and usually in financial gain for the company.

8. Pension plans are found in only about 5% of the contracts covering hourly employees.

9. The granting of paid holidays in Industry has increased more than eight-fold since 1936. The most common number of paid holidays in Industry is six days. This practice has been an outgrowth of war stabilization orders and wage agreements since the war.

10. Paid vacations are granted by 75% of the companies, for hourly workers, and by 90% of the companies for office workers. The number of weeks granted is generally one week after one year's service, and generally increases with length of service.

11. Only 3% of the manufacturing industries provide for sick leave, and only 8% provide it for office workers.

12. Guaranteed wage plans are found in 196 companies, covering sixty one thousand workers.

13. The greatest incentive in the Navy is the security provided. The Navy provides a guaranteed wage, pensions, sick leave, annual leave of thirty days, medical and hospital care.

14. The Advisory Commission on Service Pay for the Uniformed Services is the first comprehensive study of the salary administration in the Armed Services since 1908.

15. The recommendations of this Commission include a salary schedule comparable to that found in Industry.

16. The recommendations of the Commission regarding pensions if adapted by the Congress would tend to lessen the

security presently enjoyed by personnel in the Uniformed Services.

Conclusions

A study of the incentives presently utilized by Industry reveals that the Navy employs all but two of these plans.

With the great emphasis in efficiency and economy in all government departments, these two plans, profit-sharing and suggestion programs, could be adopted for use in the U. S. Navy.

A suggestion program could be established without resorting to Congressional approval. The success this plan has had in Industry indicates that it could be as equally successful in the Navy. The advantages claimed for a suggestion program in Industry should apply with the same force for the Navy. Its one particular advantage would be the status and personal satisfaction it would allow to all members of the Service who would submit acceptable suggestions. As the administrative cost of a suggestion program is small, the benefits gained by the Navy should result in worthwhile economies.

It would appear from a study of profit-sharing plans in Industry that this plan could be adopted by the naval service. Permission would have to be obtained from the Congress before such a program could be studied or undertaken. Much data would have to be assembled, correlated and evaluated before

standards could be set up. The results obtaining in companies operating on the profit-sharing principle should obtain equally well in the Navy. This plan would make the Navy cost and economy conscious, and give all members a greater appreciation of the cost to the government of maintaining the Navy. Great economics could result from the plan for the government. The greatest benefit should result for the service in greater cooperation, better relationships between officers and men, and greater job satisfaction in performing more meaningful work.

BIBLIOGRAPHY

BIBLIOGRAPHY

1. Advisory Commission on Service Pay, Career Compensation for the Uniformed Forces, Washington, D. C.: United States Government Printing Office, 1948.

2. Alexander, R. E. "Merchandise Awards Pep Up Suggestion System," Factory, Vol. 107 (April, 1949).

3. American Iron and Steel Institute, Employee Suggestion Programs in the Iron and Steel Industry. New York, N.Y., 1948.

4. Army-Navy Air Force Register, Washington, D. C. April 9, 1949.

5. Becton, F. J., "Comparative Study of Private Industrial and Navy Suggestion and Award Systems for Both Civilian and Military Personnel." Unpublished Master's thesis, Northwestern University. Evanston, Illinois, 1948.

6. Bradley, Omar N., "What You Owe Your Country," Collier's, Vol. 123 (February 26, 1949), pp. 13-15.

7. Bureau of Naval Personnel, Bureau of Naval Personnel Manual, Washington, D. C.: United States Government Printing Office, 1948.

8. ________, Facts and Figures of Naval Service, Washington, D. C.: United States Government Printing Office, October, 1945.

9. ________, Bureau memorandum, dated 4 March 1949.

10. ________, Bureau memorandum, dated 1 April 1949.

11. ________, Recruit Survey #1, Field Research Section. June 1947.

12. Cagle, M. W., "The Navy's Fitness Report System," United States Naval Institute Proceedings, Vol. LXXIII (July, 1947).

13. Council of Profit Sharing Industries, Profit Sharing Manual. Ann Arbor: Edward Brothers, Inc., 1948.

14. Factory, Vol. 106 (December, 1948), "What the Factory Worker Really Thinks."

15. Factory, Vol. 107 (March, 1949), "Union Welfare, What It Means, What It Will Cost."

16. Gardner, B. B., Human Relations in Industry. Chicago: Richard D. Irwin, Inc., 1947.

17. Ghiselli, E. E. and C. W. Brown, Personnel and Industrial Psychology. New York: McGraw-Hill Book Company, Inc., 1948.

18. Hobbs, I. E., "Motivation of Enlisted Personnel in the United States Navy." Unpublished Master's thesis, Stanford University, Stanford, California, 1948.

19. Industrial Relations Division, Department of Labor, Bureau of Labor Statistics, Guaranteed Wage Plans in the United States, Bulletin No. 925. Washington, D. C.: United States Government Printing Office, 1947.

20. _______, Supplementary Wage Practices in American Industry 1945-46. Washington, D. C.: United States Government Printing Office, 1948.

21. _______, Wage Incentive Plans and Collective Bargaining. Washington, D. C.: United States Government Printing Office, 1942.

22. Labor Relations Reporter, Vol. 22 (September 20, 1948).

23. La Piere, R. T. and P. R. Tarnsworth, Social Psychology. New York: McGraw-Hill Book Co., Inc., 1942.

24. Metropolitan Life Insurance Co. Suggestion Systems. New York: Policyholders Service Bureau, Group Insurance Division, 1942.

25. _______, How to Get Suggestions From Employees. New York: Policyholders Service Bureau, Group Insurance Division, 1927.

26. National Industrial Conference Board, Inc., Employee Suggestion Systems, New York, 1942.

27. _______, Holiday Practices, New York, 1948.

28. _______, Profit Sharing for Workers, New York, 1948.

29. ________, Wage Payment Systems, New York, 1948.

30. National Office Management Association, Office Benefits, Survey Summary #6. Philadelphia, 1948.

31. O'Neill, Hugh, Modern Pension Plans. New York: Prentice-Hall, Inc., 1947.

32. Pegors, Paul and Charles A. Myers, Personnel Administration. New York: McGraw-Hill Book Company, Inc., 1947.

33. Research Council for Economic Security, Sick Pay in Industry. Chicago, 1948.

34. San Francisco Chronicle, This World, Vol. 12 (April 17, 1949).

35. ________, This World, Vol. 12 (May 1, 1949).

36. ________, This World, Vol. 12 (April 10, 1949).

37. Shartle, C. L., Occupational Information. New York: Prentice-Hall, Inc., 1946.

38. Scott, W. D., et al., Personnel Management. New York: McGraw-Hill Book Co., 1941.

39. The Centre Democrat (Bellefonte, Penna), April 21, 1949.

40. The Sunday Star (Washington, D. C.) December 19, 1948.

41. U. S. Navy Regulations, 1948. Washington, D. C.: United States Government Printing Office, 1948.

42. War Production Drive Headquarters, War Winning Suggestions, Informative Technical Bulletin #5. Washington, D. C.: 1943.

43. Yoder, Dale, Personnel Management and Industrial Relations. New York: Prentice-Hall, Inc., 1942.

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